

$$\gamma p \rightarrow \pi^0 \gamma p / \gamma p \rightarrow \pi^0 \pi^0 p$$

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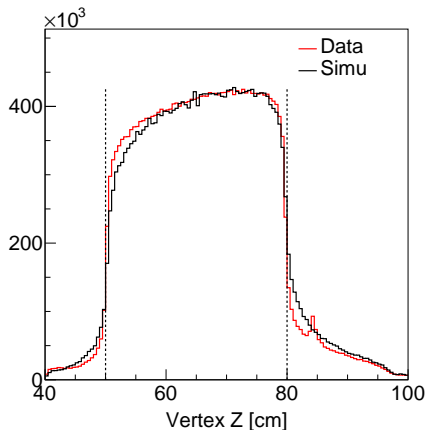
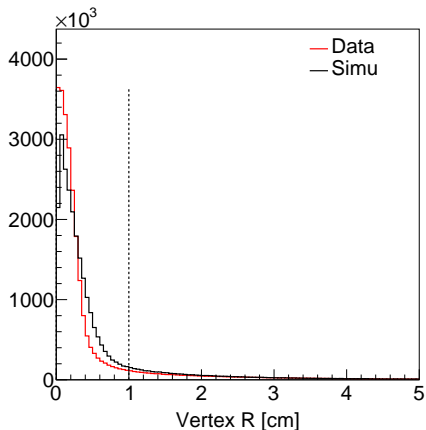
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Introduction

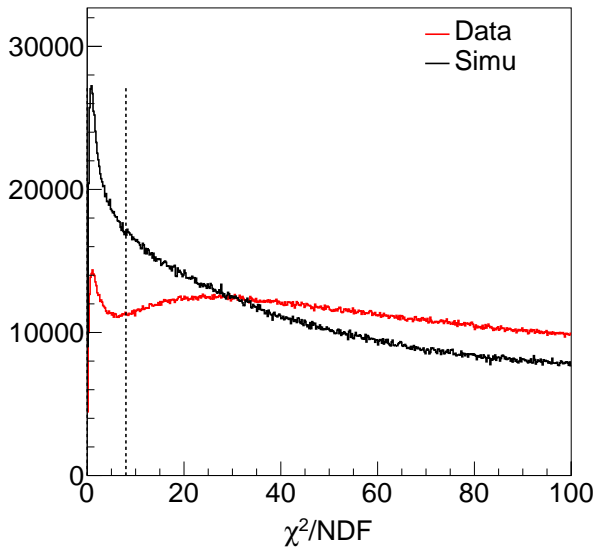
Look at:

- Data set: 5 runs of 2017
- Simulation, “bggn”

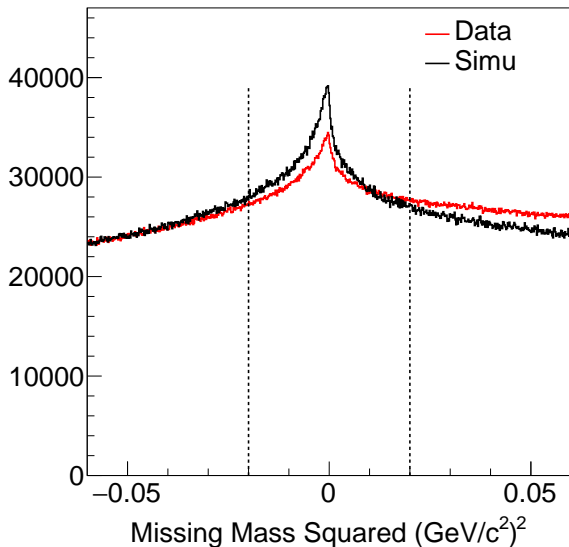
Selection criteria: vertex, $\gamma p \rightarrow \pi^0 \gamma p$



Selection criteria: kinematic fit χ^2 , $\gamma p \rightarrow \pi^0 \gamma p$

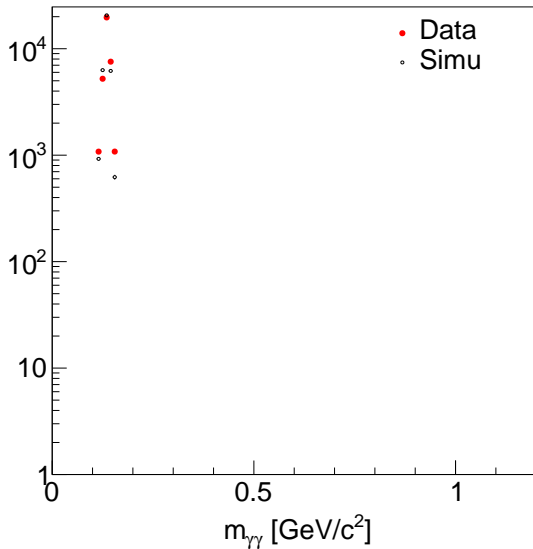


Selection criteria: missing mass squared, $\gamma p \rightarrow \pi^0 \gamma p$



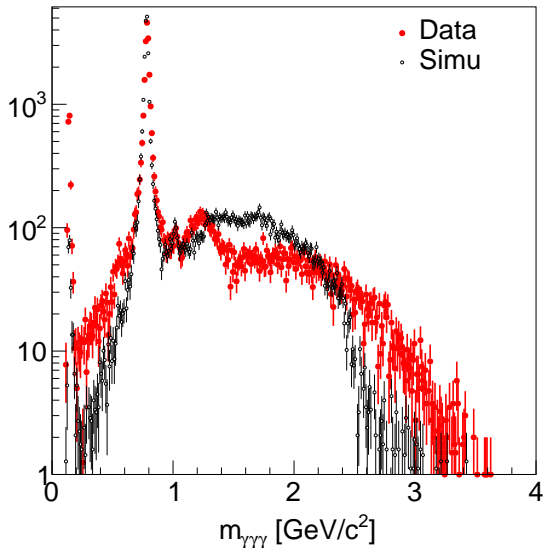
Selection criteria: coplanarity, $\gamma p \rightarrow \pi^0 \gamma p$

Selection criteria: $\gamma\gamma$ invariant mass, $\gamma p \rightarrow \pi^0 \gamma p$



$\gamma\gamma\gamma$ invariant mass, $\gamma p \rightarrow \pi^0 \gamma p$

After a cut around the π^0 mass



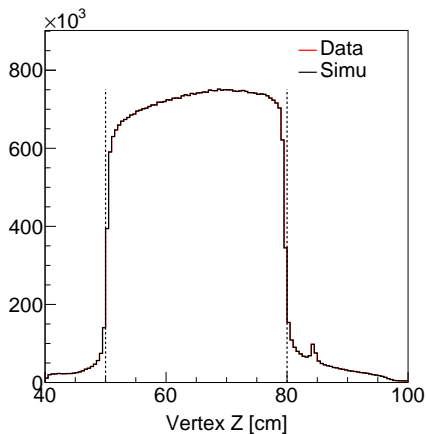
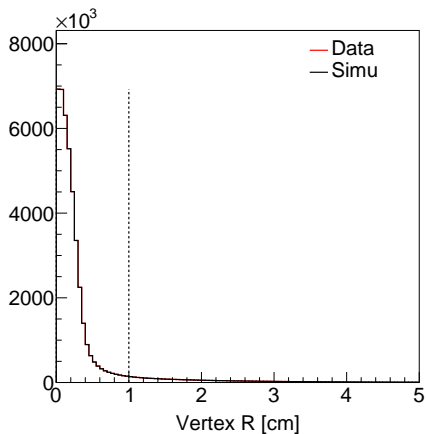
• Data, 5 peaks

- ▶ π^0
- ▶ η
- ▶ ω ,
- ▶ η
- ▶ $b_1(?)$

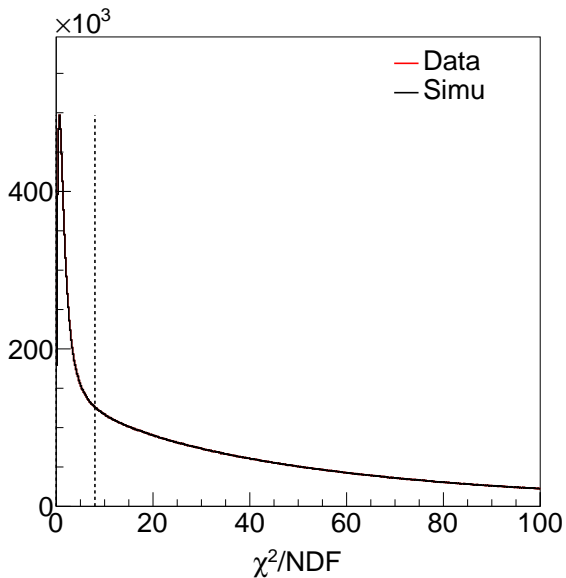
• Simu, 3 peaks

- ▶ π^0
- ▶ ω ,
- ▶ η

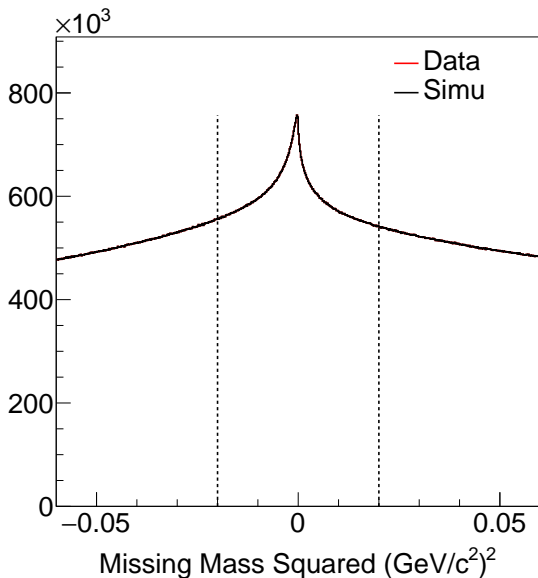
Selection criteria: vertex, $\gamma p \rightarrow \pi^0 \pi^0 p$



Selection criteria: kinematic fit χ^2 , $\gamma p \rightarrow \pi^0 \pi^0 p$

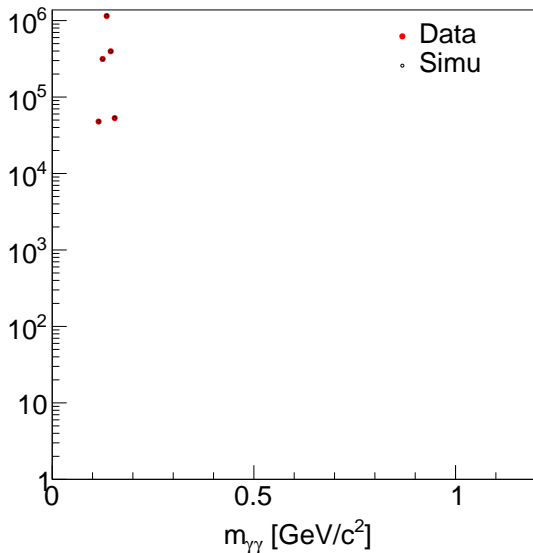


Selection criteria: missing mass squared, $\gamma p \rightarrow \pi^0 \pi^0 p$



Selection criteria: coplanarity, $\gamma p \rightarrow \pi^0 \pi^0 p$

Selection criteria: $\gamma\gamma$ invariant mass, $\gamma p \rightarrow \pi^0 \pi^0 p$



$\gamma\gamma\gamma$ invariant mass, $\gamma p \rightarrow \pi^0\pi^0 p$

After a cut around the π^0 masses

